also makes other administrative arrangements like medical facilities, security etc. For pilgrimage to other religious places in various States, the respective State Governments make administrative arrangements.

Alternative fuel for petroleum and diesel

*296. SHRIMATI VANGA GEETHA: Will the Minister of PETROLEUM AND NATURAL GAS be pleased to state:

(a) whether research at national and international level is being conducted to evolve alternative fuel in place of petroleum;

(b) if so, the success achieved in this regard so far;

(c) whether efforts are being made to find a suitable, efficient and clean alternative fuel in place of diesel also; and

(d) if so, the details in this regard?

THE MINISTER OF PETROLEUM AND NATURAL GAS (SHRI RAM NAIK): (a) to (d) Yes, Sir. Research is being conducted at national and international levels for evolving and harnessing alternate fuel/energy sources, such as bio-diesel, fuel cells, hydrogen, coal bed methane, gas hydrates, non-conventional energy sources like solar, wind, small hydro and biomass. Ethanol blend in petrol (gasohol) and in diesel is also in use in some countries.

In India, supply of gasohol with 5% ethanol, is being mandated in the States of Andhra Pradesh, Goa, Gujarat, Haryana, Karnataka, Maharashtra, Punjab, Tamil Nadu and Uttar Pradesh and Union Territories of Chandigarh, Daman & Diu, Dadra & Nagar Haveli, and Pondicherry from 1st January 2003. For 10% ethanol blending in petrol, 5% ethanol blended diesel and of bio-diesel blend in diesel, research and development work is at an advanced stage of progress. Pilot projects are being planned on 10% ethanol blend in petrol and on 5% bio-diesel in diesel.

Use of natural and Compressed Natural Gas and Liquefied Petroleum Gas (LPG) as a clean alternate fuel in place of diesel has been advocated, depending upon the availability of gas and necessary infrastructure. Coal Bed Methane (CBM) is another source of fuel on which exploitation efforts are on to augment natural gas availability.